

Alden K.W. Lee (SBN 257973)
BARTKO ZANKEL BUNZEL & MILLER
A Professional Law Corporation
One Embarcadero Center, Suite 800
San Francisco, CA 94111
T: 415-956-1900
Email: alee@bzbm.com

Jeremy P. Oczek (*Pro Hac Vice To Be Filed*)
BOND, SCHOENECK & KING PLLC
200 Delaware Avenue, Suite 900
Buffalo, NY 14202
T: (716) 416-7037
Email: jpoczek@bsk.com

Jonathan L. Gray (*Pro Hac Vice To Be Filed*)
BOND, SCHOENECK & KING PLLC
One Lincoln Center, 110 West Fayette Street
Syracuse, NY 13202
Telephone: (315) 218-8621
Email: jlgray@bsk.com

Counsel for Plaintiffs
Signify North America Corporation
and Signify Holding B.V.

**UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA**

SIGNIFY NORTH AMERICA CORPORATION
and
SIGNIFY HOLDING B.V.

Plaintiffs,

v.

KIND LED GROW LIGHTS LLC
and
SUPERCLOSET (d/b/a KIND LED GROW LIGHTS)

Defendants.

CASE NO.

**COMPLAINT FOR PATENT
INFRINGEMENT**

DEMAND FOR JURY TRIAL

1 Plaintiffs Signify North America Corporation and Signify Holding B.V. (collectively,
2 “Signify”) for their complaint against Defendants Kind LED Grow Lights, LLC and Supercloset
3 (d/b/a Kind LED Grow Lights) (collectively, “Defendants”) allege as follows:

4 **NATURE OF THE ACTION**

5 1. This is a civil action for patent infringement arising under the patent laws of the
6 United States, 35 U.S.C. § 1 *et seq.* including 35 U.S.C. § 271, which gives rise to the remedies
7 specified under 35 U.S.C. §§ 281 and 283-285.

8 **THE PARTIES**

9 2. Plaintiff Signify North America Corporation is a corporation organized and
10 existing under the laws of Delaware with its principal place of business at 200 Franklin Square
11 Drive, Somerset, New Jersey 08873.

12 3. Plaintiff Signify Holding B.V. is a corporation organized and existing under the
13 laws of the Netherlands with its registered office at High Tech Campus 48, 5656 AE
14 Eindhoven, The Netherlands.

15 4. On information and belief, Defendant Kind LED Grow Lights, LLC is a limited-
16 liability corporation organized and existing under the laws of California with a place of business
17 at 3555 Airway Drive, Santa Rosa, California 95403, was formed in or about 2019, and has sold
18 and continues to sell products under the Kind LED Grow Lights brand. On information and
19 belief, Kip Andersen is a key principal at Defendant Kind LED Grow Lights, LLC.

20 5. On information and belief, Defendant Supercloset (d/b/a Kind LED Grow
21 Lights) a corporation organized and existing under the laws of California with a place of
22 business at 3555 Airway Drive, Santa Rosa, California 95403, was formed in or about 2002,
23 was registered to do business as Kind LED Grow Lights from at least 2014 to 2019, and has
24 sold and continues to sell products under the Kind LED Grow Lights brand. On information and
25 belief, Kip Andersen is a key principal at Defendant Supercloset.

26 **JURISDICTION AND VENUE**

27 6. This Court has subject-matter jurisdiction over this patent infringement action
28 pursuant to 28 U.S.C. §§ 1331 and 1338.

1 7. This Court has personal jurisdiction over Defendants, on information and belief,
2 for at least the following reasons: (i) Defendants have committed acts of patent infringement in
3 this District; (ii) Defendants regularly conduct business, solicit business, and/or derive
4 substantial revenue from products provided within this District, including products that infringe
5 patented technology; and (iii) Defendants share a place of business within this District at 3555
6 Airway Drive, Santa Rosa, California 95403.

7 8. Venue properly lies in this District. Pursuant to 28 U.S.C. § 1400, on information
8 and belief, Defendants have committed acts of patent infringement in this District and share a
9 regular and established place of business in this District at 3555 Airway Drive, Santa Rosa,
10 California 95403.

11 **THE PATENTS-IN-SUIT**

12 9. Signify, formerly Philips Lighting, is a global market leader with recognized
13 expertise in the development, manufacturing, and application of innovative LED lighting
14 solutions. Signify's LED lighting products have been installed and utilized throughout the
15 world, including on San Francisco City Hall (<https://www.signify.com/en-us/blog/archive/showcase/five-years-of-dynamic-led-lighting-by-color-kinetics>)
16



1 and the San Francisco Bay Bridge ([https://www.signify.com/global/our-company/news/press-](https://www.signify.com/global/our-company/news/press-release-archive/2016/20160128-artist-leo-villareal-shines-a-permanent-light-on-san-francisco-with-led-lighting-from-philips)
2 [release-archive/2016/20160128-artist-leo-villareal-shines-a-permanent-light-on-san-francisco-](https://www.signify.com/global/our-company/news/press-release-archive/2016/20160128-artist-leo-villareal-shines-a-permanent-light-on-san-francisco-with-led-lighting-from-philips)
3 [with-led-lighting-from-philips](https://www.signify.com/global/our-company/news/press-release-archive/2016/20160128-artist-leo-villareal-shines-a-permanent-light-on-san-francisco-with-led-lighting-from-philips)).



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15 10. To protect its innovations resulting from its significant investments, Signify
16 applied for and obtained numerous patents directed to various LED inventions and technologies.
17 For example, Signify's LED-related patents include U.S. Patent Nos. 6,250,774, 6,692,136,
18 7,348,604, and 7,766,518 (collectively, the "Patents-in-Suit").

19 11. U.S. Patent No. 6,250,774 ("the '774 Patent"), titled "Luminaire," was duly and
20 legally issued by the United States Patent and Trademark Office on June 26, 2001. Plaintiff
21 Signify North America Corporation is the assignee and owner of all right, title, and interest in
22 the '774 Patent, a copy of which is attached as Exhibit 1.

23 12. U.S. Patent No. 6,692,136 ("the '136 Patent"), titled "LED/Phosphor-LED
24 Hybrid Lighting Systems" was duly and legally issued by the United States Patent and
25 Trademark Office on February 17, 2004. Plaintiff Signify Holding B.V. is the assignee and
26 owner of all right, title, and interest in the '136 Patent, a copy of which is attached as Exhibit 2.

27 13. U.S. Patent No. 7,348,604 ("the '604 Patent"), titled "Light-Emitting Module,"
28 was duly and legally issued by the United States Patent and Trademark Office on March 25,

2008. Plaintiff Signify Holding B.V. is the assignee and owner of all right, title, and interest in the '604 Patent, a copy of which is attached as Exhibit 3.

14. U.S. Patent No. 7,766,518 ("the '518 Patent"), titled "LED-Based Light-Generating Modules for Socket Engagement, and Methods of Assembling, Installing and Removing Same," was duly and legally issued by the United States Patent and Trademark Office on August 3, 2010. Plaintiff Signify North America Corporation is the assignee and owner of all right, title, and interest in the '518 Patent, a copy of which is attached as Exhibit 4.

COUNT ONE

INFRINGEMENT OF U.S. PATENT NO. 6,250,774

15. Signify incorporates by reference the allegations in paragraphs 1-14 as if fully set forth herein.

16. On information and belief, Defendants have infringed claims of the '774 Patent, including at least claim 1, in violation of 35 U.S.C. § 271(a) by manufacturing, using, offering to sell, selling, and/or importing infringing products.

17. Claim 1 of the '774 patent recites:

A luminaire comprising:

a housing with a light emission window,

at least one lighting module in said housing for illuminating an object outside said housing,

the lighting module comprising a set of lighting units,

each of said lighting units comprising at least one LED chip and an optical system configured to illuminate portions of the object during operation, each said LED chip supplying a luminous flux of at least 5 lm during operation.

18. On information and belief, Defendants have directly infringed, at least, claim 1 of the '774 Patent by making, using, offering to sell, selling, and/or importing at least L300 and XL750 products in this judicial district and elsewhere in the United States.

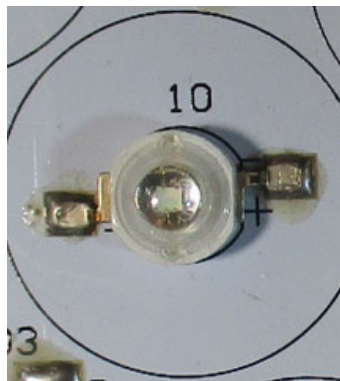
Infringing L300 Products

19. On information and belief, L300 products are luminaires. An L300 product is shown in the below image, from an archived version of Defendants' website (<http://web.archive.org/web/20160501072525/https://kindledgrowlights.com/product/led-grow-lights-k3-l300/>):



20. On information and belief, L300 products include a housing with a light emission window; for example, L300 products include a housing formed, at least in part, by a metal frame that defines a series of apertures, each forming a light emission window for a light output of a respective LED.

21. On information and belief, L300 products include at least one lighting module in said housing for illuminating an object outside said housing, the lighting module comprising a set of lighting units, each of said lighting units comprising at least one LED chip and an optical system configured to illuminate portions of the object during operation; for example, L300 products include multiple lighting modules enclosed within the housing. The lighting modules each include a set of lighting units. Each lighting unit is formed by an LED die and an optical system, itself formed by a dome lens and a secondary optical lens.



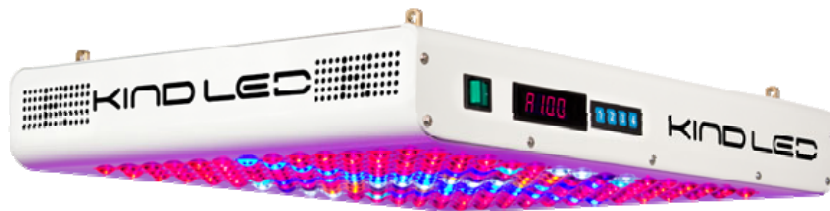
22. On information and belief, the lighting units illuminate portions of the canopy of a plant or plants, as shown in the image below (from the L300 user manual, available at https://cdn.shopify.com/s/files/1/1260/1841/files/KIND_K3_INSTRUCTIONS_2016.pdf?3638442959736875800):



23. On information and belief, each said LED chip supplies a luminous flux of at least 5 lm during operation; for example, each LED die is a 3W chip that supplies a luminous flux of more than 5 lm during operation.

Infringing XL750 Products

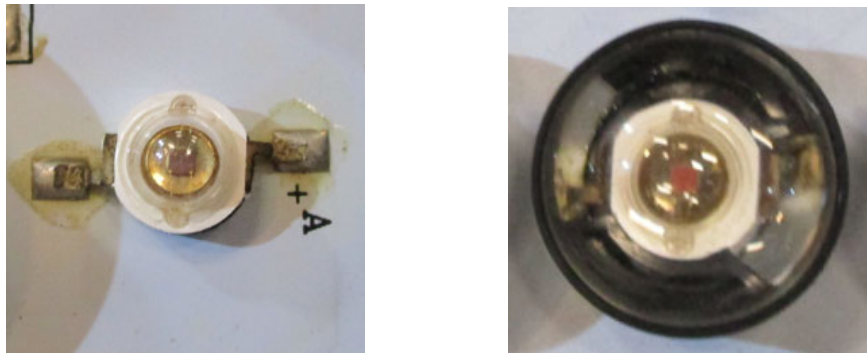
24. On information and belief, XL750 products are luminaires. An XL750 product is shown in the below image, from an archived version of Defendants' website (<http://web.archive.org/web/20160501072716/https://kindledgrowlights.com/product/best-led-grow-light-k5-xl750/>):



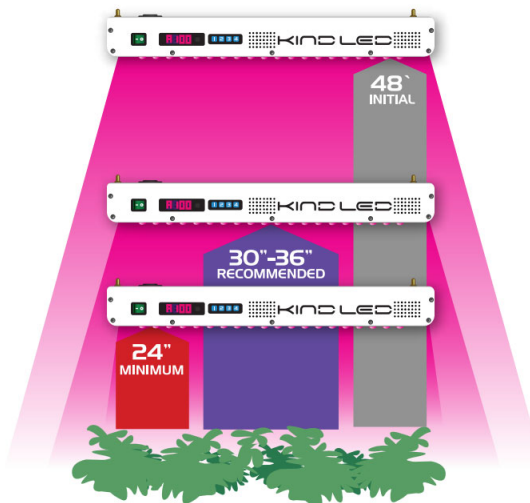
25. On information and belief, XL750 products include a housing with a light emission window; for example, XL750 products include a housing formed, at least in part, by a

1 metal frame that defines a series of apertures, each forming a light emission window for a light
2 output of a respective LED.

3 26. On information and belief, XL750 products include at least one lighting module
4 in said housing for illuminating an object outside said housing, the lighting module comprising a
5 set of lighting units, each of said lighting units comprising at least one LED chip and an optical
6 system configured to illuminate portions of the object during operation; for example, XL750
7 products include multiple lighting modules enclosed within the housing. The lighting modules
8 each include a set of lighting units. Each lighting unit is formed by an LED die and an optical
9 system itself formed by a dome lens and a secondary optical lens.



16 27. On information and belief, the lighting units illuminate portions of the canopy of
17 a plant or plants, as shown in the image below (from the XL750 user manual, available at
18 [https://cdn.shopify.com/s/files/1/1260/1841/files/K5_BOOK_WEB_2016_new.pdf?1348464530](https://cdn.shopify.com/s/files/1/1260/1841/files/K5_BOOK_WEB_2016_new.pdf?13484645307279714259)
19 [7279714259](https://cdn.shopify.com/s/files/1/1260/1841/files/K5_BOOK_WEB_2016_new.pdf?13484645307279714259)):



1 28. On information and belief, each said LED chip supplies a luminous flux of at
2 least 5 lm during operation; for example, each LED die is a 3W or 5W chip that supplies a
3 luminous flux of more than 5 lm during operation.

4 29. The full extent of Defendants' infringement is not presently known to Signify. On
5 information and belief, Defendants have made and sold products under different names or part
6 numbers that have infringed the '774 Patent in a similar manner. Signify makes this preliminary
7 identification of infringing products and infringed claims in Count One without the benefit of
8 discovery or claim construction in this action, and expressly reserves the right to augment,
9 supplement, and revise its identifications based on additional information obtained through
10 discovery or otherwise.

11 30. Signify has suffered damages as a result of Defendants' infringement of the '774
12 Patent in an amount to be determined at trial.

13 31. On information and belief, Defendants have been aware of and have had notice
14 and actual knowledge of the '774 Patent and its infringement of the '774 Patent since at least as
15 early as May 2016. For example, Defendants and Kip Andersen were notified in a letter dated
16 May 17, 2016 that Defendants' L300 products infringed the '774 Patent. This notice serves as
17 actual notice for, at least, L300 products and for all substantially similar products, such as
18 XL750 products. Further, upon information and belief, K3 series L450 and L600 products and
19 K5 series XL1000 products are believed to be substantially similar to L300 products and, thus,
20 Defendants and Kip Andersen were likewise on actual notice of infringement for these products
21 by the letter of May 17, 2016.

22 32. Defendants' pre-suit knowledge of the '774 Patent and failure to substantively
23 address Signify's numerous notifications of infringement are sufficient to support a plausible
24 inference that Defendants' infringement was willful and egregious, warranting enhancement of
25 damages under 35 U.S.C. § 284, and attorneys' fees and costs incurred under 35 U.S.C. § 285.

COUNT TWO

INFRINGEMENT OF U.S. PATENT NO. 6,692,136

33. Signify incorporates by reference the allegations in paragraphs 1-14 as if fully set forth herein.

34. On information and belief, Defendants have infringed claims of the '136 Patent, including at least claims 1, 3, and 5 in violation of 35 U.S.C. § 271(a) by manufacturing, using, offering to sell, selling, and/or importing infringing products.

35. Claim 1 of the '136 Patent recites:

A lighting system for producing white light, the system comprising:

at least one light emitting diode; and

a phosphor-light emitting diode disposed adjacent to the at least one light emitting diode.

36. Claim 3 of the '136 Patent recites:

The lighting system according to claim 1, further comprising at least a second light emitting diode.

37. Claim 5 of the '136 Patent recites:

The lighting system according to claim 3, wherein the light emitted from the light emitting diodes are of the same general color but have different spectral wavelengths.

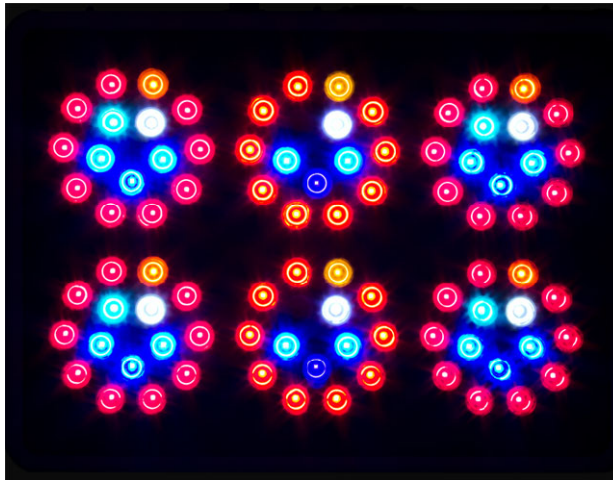
38. On information and belief, Defendants have directly infringed, at least, claims 1, 3, and 5 of the '136 Patent by making, using, offering to sell, selling, and/or importing at least L300, XL300, XL750, and XL750 WiFi products in this judicial district and elsewhere in the United States.

Infringing L300 Products

39. On information and belief, L300 products produce white light.

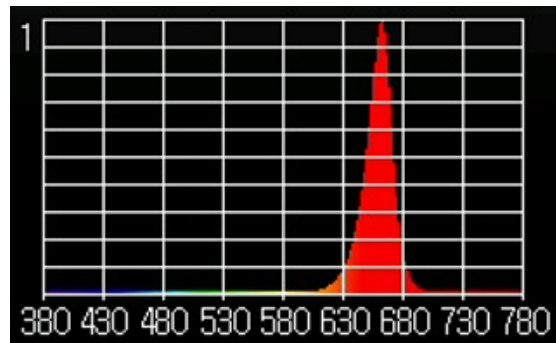
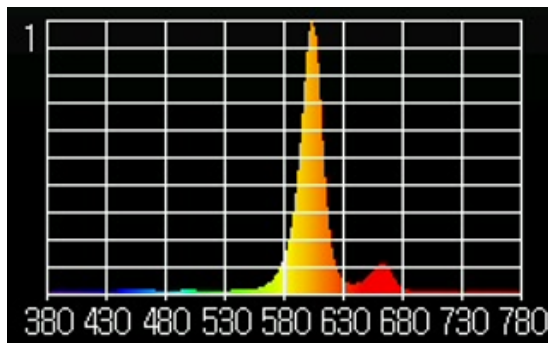
40. On information and belief, L300 products include at least one light emitting diode; for example, L300 products include a plurality of light emitting diodes.

41. On information and belief, L300 products include a phosphor-light emitting diode disposed adjacent to the at least one light emitting diode; for example, L300 products include a plurality of phosphor light emitting diodes, each of which comprises a blue light emitting diode coated with a phosphor in order to produce white light, and each of which is positioned next to a light emitting diode. (The below image of an illuminated L300 product is from an archived version of Defendants' website available at <http://web.archive.org/web/20160501072525/https://kindledgrowlights.com/product/led-grow-lights-k3-l300/>.)

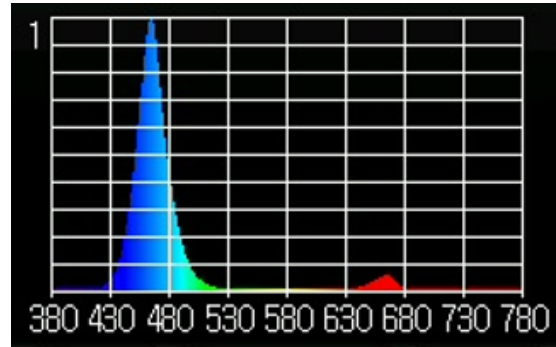
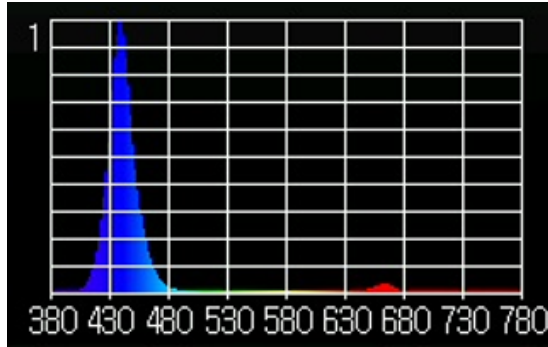


42. On information and belief, L300 products include at least a second light emitting diode; for example, the plurality of light emitting diodes include at least two red light emitting diodes.

43. On information and belief, the light emitted from the light emitting diodes are of the same general color but have different spectral wavelengths; for example, the two red LEDs have different spectral wavelengths: a first red LED with a spectral peak of approximately 603 nm and a second red LED with a spectral peak of approximately 661 nm.



44. On information and belief, in the alternative, the plurality of light emitting diodes include at least two blue light emitting diodes that have different spectral wavelengths: a first blue LED with a spectral peak of approximately 438 nm and a second blue LED with a spectral peak of approximately 465 nm.

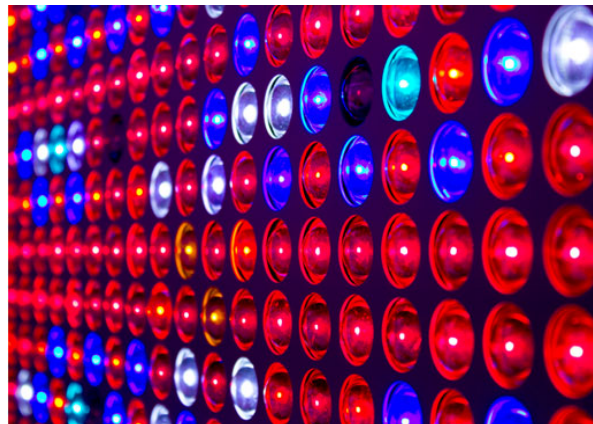


Infringing XL750 Products

45. On information and belief, XL750 products produce white light.

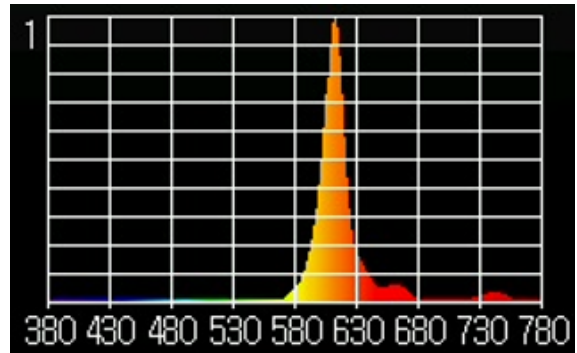
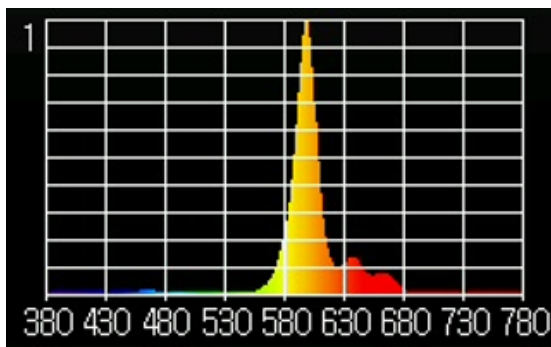
46. On information and belief, XL750 products include at least one light emitting diode; for example, XL750 products include a plurality of light emitting diodes.

47. On information and belief, XL750 products include a phosphor-light emitting diode disposed adjacent to the at least one light emitting diode; for example, XL750 products include a plurality of phosphor light emitting diodes, each of which comprises a blue light emitting diode coated with a phosphor in order to produce white light, and each of which is positioned next to a light emitting diode. (The below image of an illuminated XL750 product is from an archived version of Defendants' website available at <http://web.archive.org/web/20160501072716/https://kindledgrowlights.com/product/best-led-grow-light-k5-xl750/>.)

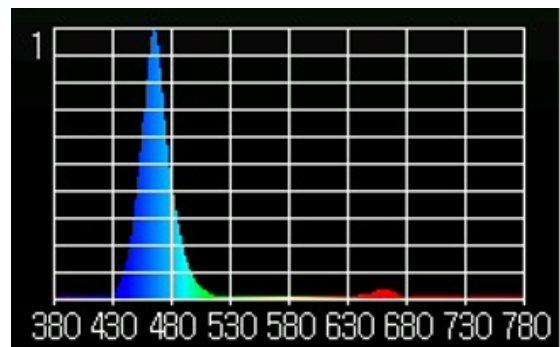
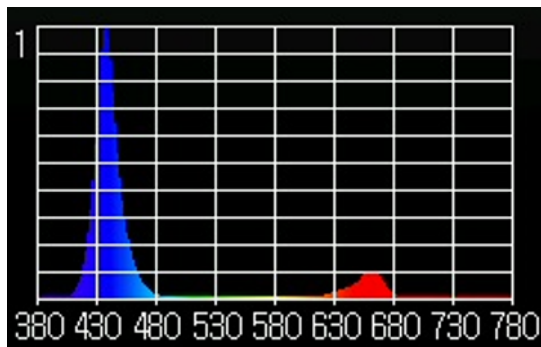


48. On information and belief, XL750 products include at least a second light emitting diode; for example, the plurality of light emitting diodes include at least two red light emitting diodes.

49. On information and belief, the light emitted from the light emitting diodes are of the same general color but have different spectral wavelengths; for example, the two red light emitting diodes have different spectral wavelengths: a first red LED with a spectral peak of approximately 598 nm and a second red LED with a spectral peak of approximately 612 nm.



50. On information and belief, in the alternative, XL750 products include at least two blue light emitting diodes that have different spectral wavelengths: a first blue LED with a spectral peak of approximately 437 nm and a second blue LED with a spectral peak of approximately 464 nm.



Infringing XL300 Products

51. On information and belief, XL300 products produce white light. An XL300 product is shown in the below image from an archived version of Defendants' website (<http://web.archive.org/web/20210519031925/https://www.kindledgrowlights.com/products/xl300-led-grow-lights>):



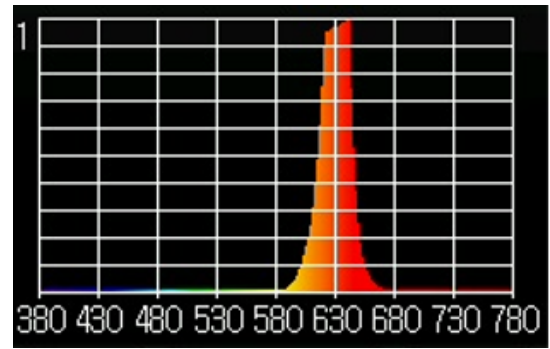
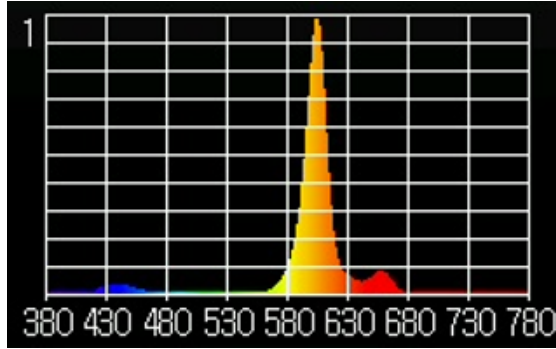
52. On information and belief, XL300 products include at least one light emitting diode; for example, XL300 products include a plurality of light emitting diodes.

53. On information and belief, XL300 products include a phosphor-light emitting diode disposed adjacent to the at least one light emitting diode; for example, XL300 products include a plurality of phosphor light emitting diodes, each of which comprises a blue light emitting diode coated with a phosphor in order to produce white light, and each of which is positioned next to a light emitting diode.

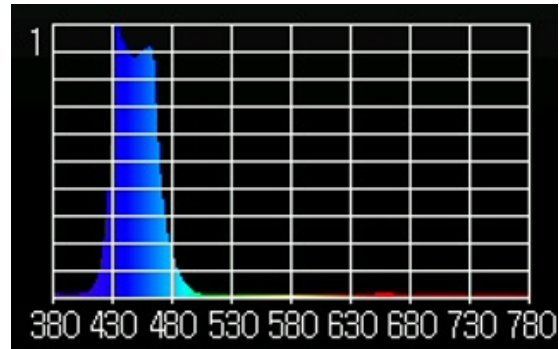
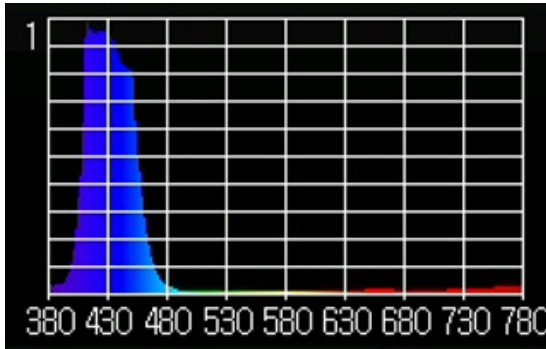


54. On information and belief, XL300 products include at least a second light emitting diode; for example, the plurality of light emitting diodes include at least two red light emitting diodes.

55. On information and belief, the light emitted from the light emitting diodes are of the same general color but have different spectral wavelengths; for example, the two red light emitting diodes have different spectral wavelengths: a first red LED with a spectral peak of approximately 604 nm and a second red LED with a spectral peak of approximately 640 nm.



56. On information and belief, in the alternative, XL300 products include at least two blue light emitting diodes that have different spectral wavelengths: a first blue LED with a spectral peak of approximately 411 nm and a second blue LED with a spectral peak of approximately 433 nm.



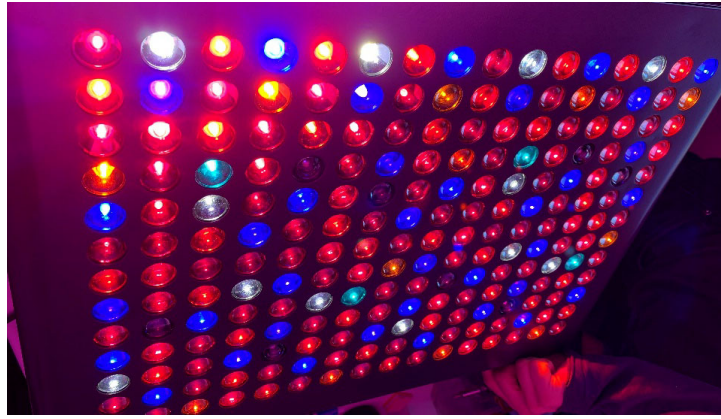
Infringing XL750 WiFi Products

57. On information and belief, XL750 WiFi products produce white light. An XL750 WiFi product is shown in the below image from an archived version of Defendants' website (<http://web.archive.org/web/20201029113843/https://www.kindledgrowlights.com/products/k5-xl750-wifi-led-grow-lights>):



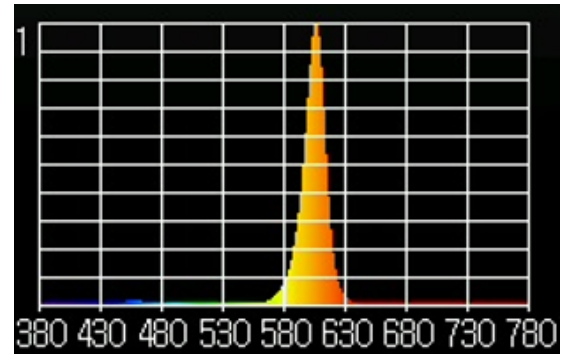
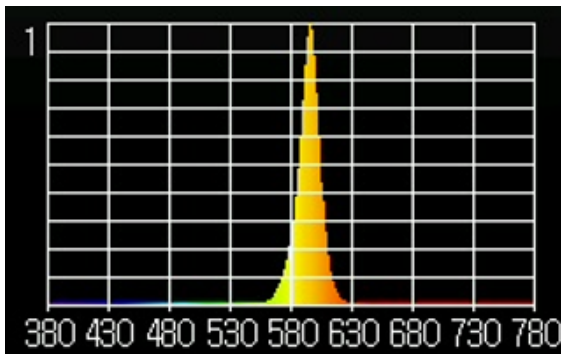
58. On information and belief, XL750 WiFi products include at least one light emitting diode; for example, XL750 WiFi products include a plurality of light emitting diodes.

59. On information and belief, XL750 WiFi products include a phosphor-light emitting diode disposed adjacent to the at least one light emitting diode; for example, XL750 WiFi products include a plurality of phosphor light emitting diodes, each of which comprises a blue light emitting diode coated with a phosphor in order to produce white light, and each of which is positioned next to a light emitting diode.

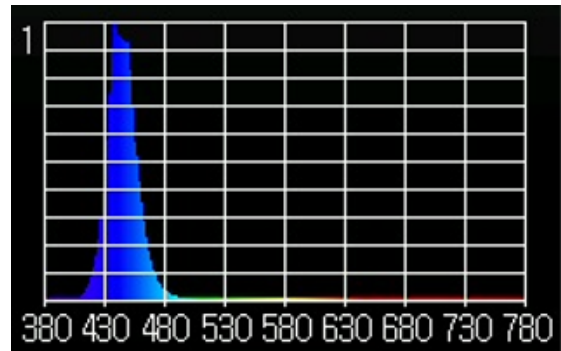
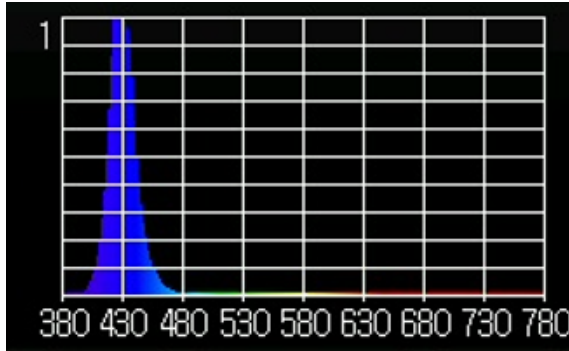


60. On information and belief, XL750 WiFi products include at least a second light emitting diode; for example, the plurality of light emitting diodes include at least two red light emitting diodes.

61. On information and belief, the light emitted from the light emitting diodes are of the same general color but have different spectral wavelengths; for example, the two red light emitting diode have different spectral wavelengths: a first red LED with a spectral peak of approximately 595 nm and a second red LED with a spectral peak of approximately 605 nm.



62. On information and belief, in the alternative, XL750 WiFi products include at least two blue light emitting diodes that have different spectral wavelengths: a first blue LED with a spectral peak of approximately 425 nm and a second blue LED with a spectral peak of approximately 437 nm.



63. The full extent of Defendants' infringement is not presently known to Signify. On information and belief, Defendants have made and sold products under different names or part numbers that have infringed the '136 Patent in a similar manner. Signify makes this preliminary identification of infringing products and infringed claims in Count Two without the benefit of discovery or claim construction in this action, and expressly reserves the right to augment, supplement, and revise its identifications based on additional information obtained through discovery or otherwise.

64. Signify has suffered damages as a result of Defendants' infringement of the '136 Patent in an amount to be determined at trial.

65. On information and belief, Defendants have been aware of and have had notice and actual knowledge of the '136 Patent and its infringement of the '136 Patent since at least as early as May 2016. For example, Defendants and Kip Andersen were notified in a letter dated May 17, 2016 that Defendants' L300 products infringed the '136 Patent. This letter serves as actual notice for, at least, L300 products and for all substantially similar products, such as XL750, XL300, and XL750 WiFi products. Further, upon information and belief, K3 series L450, L600, XL450, XL600 products and K5 series XL1000 and XL1000 WiFi products are believed to be substantially similar to L300 products and, thus, Defendants and Kip Andersen were likewise on actual notice of infringement for these products by the letter of May 17, 2016

1 as of the date of the letter or, if later, the date these products were first made, used, sold, offered
2 for sale, or imported.

3 66. Defendants' pre-suit knowledge of the '136 Patent and failure to substantively
4 address Signify's numerous notifications of infringement are sufficient to support a plausible
5 inference that Defendants' infringement was willful and egregious, warranting enhancement of
6 damages under 35 U.S.C. § 284, and attorneys' fees and costs incurred under 35 U.S.C. § 285.

7 **COUNT THREE**

8 **INFRINGEMENT OF U.S. PATENT NO. 7,348,604**

9 67. Signify incorporates by reference the allegations in paragraphs 1-14 as if fully set
10 forth herein.

11 68. On information and belief, Defendants have infringed and are infringing claims
12 of the '604 Patent, including at least claims 1 and 8, in violation of 35 U.S.C. § 271(a) by
13 manufacturing, using, offering to sell, selling, and/or importing infringing products.

14 69. Claim 1 of the '604 patent recites:

15 A light-emitting module comprising:

16 (a) a thermally conductive substrate having one or more light-
17 emitting elements thermally connected thereto, the substrate configured to
18 operatively couple a source of power to the one or more light-emitting
19 elements, thereby providing a means for activation of the one or more
20 light-emitting elements;

21 (b) a heat dissipation element thermally coupled to the thermally
22 conductive substrate; and

23 (c) a housing element including fastening means for detachably
24 coupling the housing element to the heat dissipation element, said
25 substrate being enclosed between the heat dissipation element and said
26 housing element, said housing element including a transparent region
27 enabling transmission of light emitted by the one or more light-emitting
28 elements therethrough.

70. Claim 8 of the '604 Patent recites:

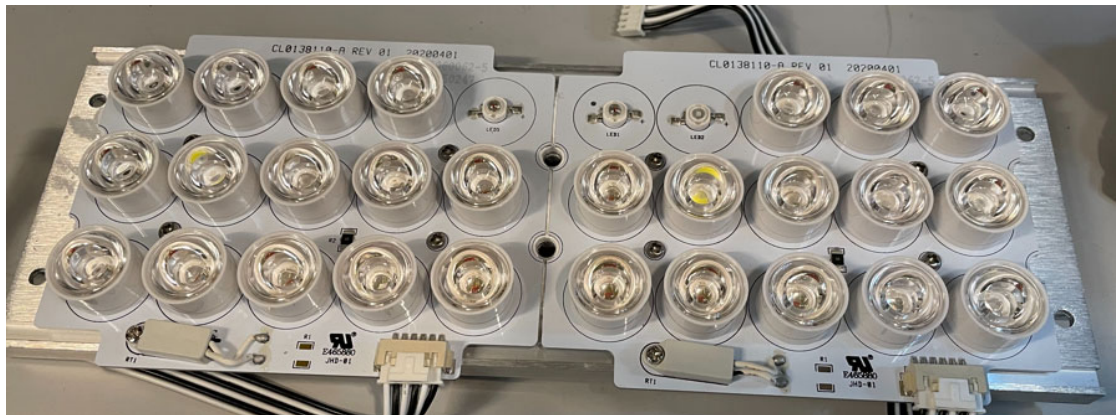
The light-emitting module according to claim 1, wherein the substrate is a metal core printed circuit board or a FR4 board.

71. On information and belief, Defendants have directly infringed and are directly infringing, at least, claim 1 and 8 of the '604 Patent by making, using, offering to sell, selling, and/or importing at least XL300, XL750 WiFi, XD75, and X² products in this judicial district and elsewhere in the United States.

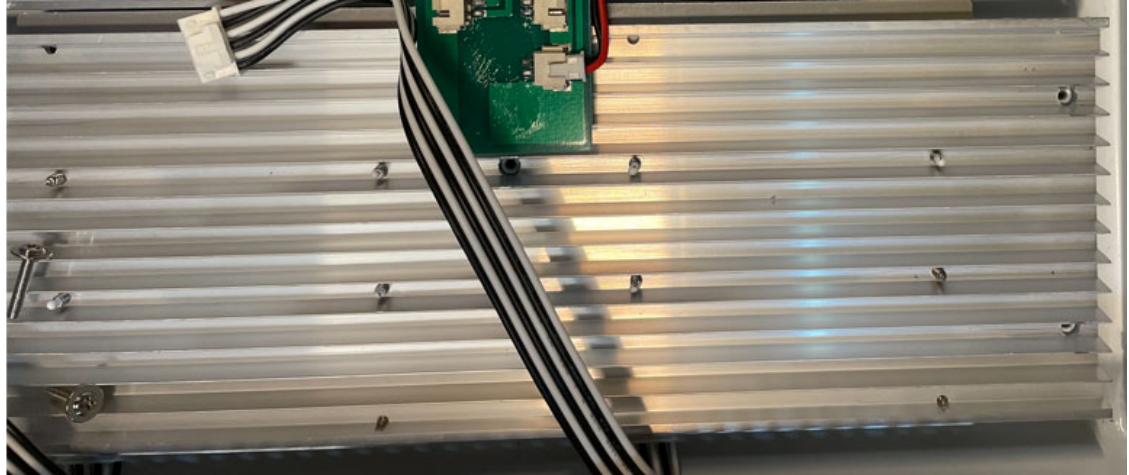
Infringing XL300 Products

72. On information and belief, XL300 products include a light-emitting module.

73. On information and belief, XL300 products include a thermally conductive substrate having one or more light-emitting elements thermally connected thereto, the substrate configured to operatively couple a source of power to the one or more light-emitting elements, thereby providing a means for activation of the one or more light-emitting elements; for example, XL300 products include a thermally conductive substrate formed by a metal-core printed circuit board thermally connected to LEDs. The metal-core printed circuit board is configured to operatively couple a source of power—an LED driver—to the LEDs in order to power and thus activate the LEDs.



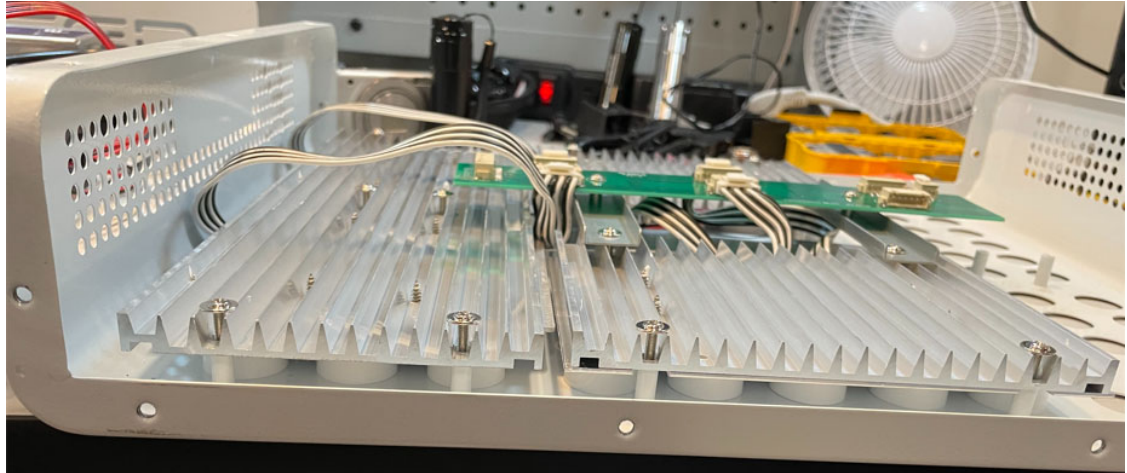
74. On information and belief, XL300 products include a heat dissipation element thermally coupled to the thermally conductive substrate; for example, XL300 products include a heat dissipation element formed by a heat sink, which is thermally coupled to the metal-core printed circuit board.



75. On information and belief, XL300 products include a housing element including fastening means for detachably coupling the housing element to the heat dissipation element; for example, XL300 products include a housing element, formed by a metal frame and secondary optical lenses. The housing element further includes threaded bores and screws to detachably couple the housing element to the heat sink.



76. On information and belief, the substrate is enclosed between the heat dissipation element and said housing element; for example, the metal-core printed circuit board is enclosed between the heat sink and the metal frame and secondary optical lenses.



77. On information and belief, the housing element includes a transparent region enabling transmission of light emitted by the one or more light-emitting elements therethrough; for example, the housing element includes transparent regions, formed by secondary optical lenses, that enable transmission of light emitted by LEDs to the outside of the housing element.



78. On information and belief, the substrate is a metal core printed circuit board.



Infringing XL750 WiFi Products

79. On information and belief, XL750 WiFi products include a light-emitting module, as shown below.

80. On information and belief, XL750 WiFi products include a thermally conductive substrate having one or more light-emitting elements thermally connected thereto, the substrate configured to operatively couple a source of power to the one or more light-emitting elements, thereby providing a means for activation of the one or more light-emitting elements; for example, XL750 WiFi products include a thermally conductive substrate formed by a metal-core printed circuit board thermally connected to LEDs. The metal-core printed circuit board is configured to operatively couple a source of power—an LED driver—to the LEDs in order to power and thus activate the LEDs.



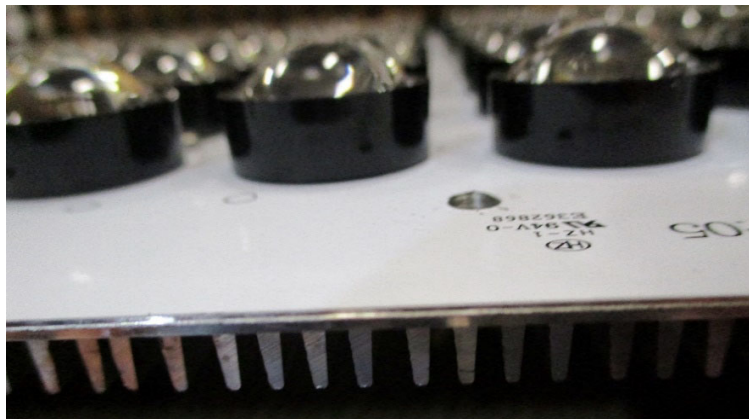
81. On information and belief, XL750 WiFi products include a heat dissipation element thermally coupled to the thermally conductive substrate; for example, XL750 WiFi products include a heat dissipation element formed by a heat sink, which is thermally coupled to the metal-core printed circuit board.



1 82. On information and belief, XL750 WiFi products include a housing element
2 including fastening means for detachably coupling the housing element to the heat dissipation
3 element; for example, XL750 WiFi products include a housing element, formed by a metal
4 frame and secondary optical lenses. The housing element further includes threaded bores and
5 screws to detachably couple the housing element to the heat sink.



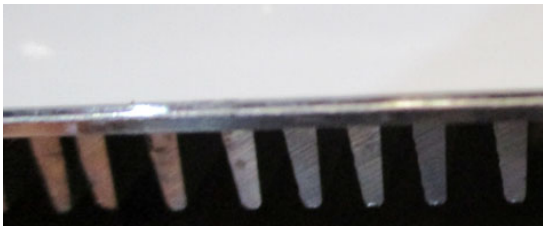
15 83. On information and belief, the substrate is enclosed between the heat dissipation
16 element and said housing element; for example, the metal-core printed circuit board is enclosed
17 between the heat sink and the metal frame and secondary optical lenses.



25 84. On information and belief, the housing element includes a transparent region
26 enabling transmission of light emitted by the one or more light-emitting elements therethrough;
27 for example, the housing element includes transparent regions, formed by secondary optical
28 lenses, that enable transmission of light emitted by LEDs to the outside of the housing element.



85. On information and belief, the substrate is a metal core printed circuit board.



Infringing XD75 Products

86. On information and belief, XD75 products include a light-emitting module. An XD75 product is shown in the below image, from Defendants' website (available at: <https://www.kindledgrowlights.com/products/xd75-xd150-bar-led-grow-lights>).



87. On information and belief, XD75 products come in two spectral variants: vegetative and flower. Additionally, both spectral variants of XD75 products come in 4ft and 8ft lengths. On information and belief, these spectral variants of XD75 products are structurally identical, differing only in the spectrum of light produced by the LEDs. Further, on information and belief, both lengths of XD75 products are structurally identical apart from length.

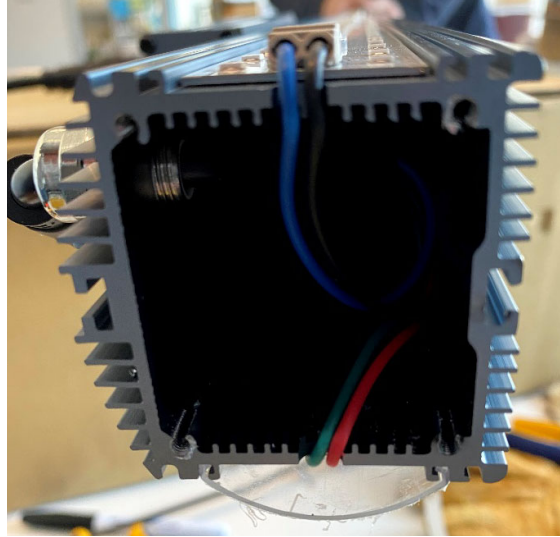
Accordingly, all allegations detailed below should be understood to apply equally to the vegetative and flower spectral variants and to the 4ft and 8ft lengths of the XD75 products.

88. On information and belief, XD75 products include a thermally conductive substrate having one or more light-emitting elements thermally connected thereto, the substrate configured to operatively couple a source of power to the one or more light-emitting elements, thereby providing a means for activation of the one or more light-emitting elements; for example, XD75 products include a thermally conductive substrate formed by a metal-core printed circuit board thermally connected to LEDs. The metal-core printed circuit board is configured to operatively couple a source of power—an LED driver—to the LEDs in order to power and thus activate the LEDs.

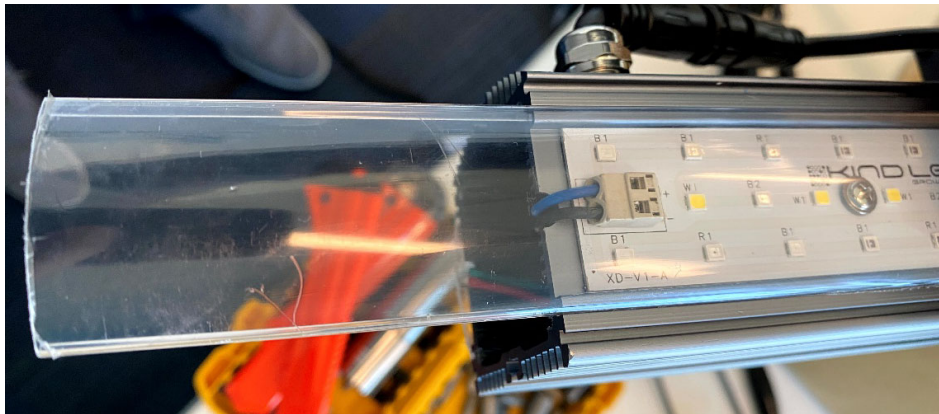


89. On information and belief, XD75 products include a heat dissipation element thermally coupled to the thermally conductive substrate; for example, XD75 products include a heat dissipation element formed by a heat sink, which is thermally coupled to the printed circuit board.

90. On information and belief, XD75 products include a housing element including fastening means for detachably coupling the housing element to the heat dissipation element; for example, XD75 products include a housing element, formed by a transparent window. The transparent window includes a flange that detachably couples to the heat sink via contact with a slot formed in the heat sink.



91. On information and belief, the substrate is enclosed between the heat dissipation element and said housing element; for example, the printed circuit board is enclosed between the transparent window and the heat sink.



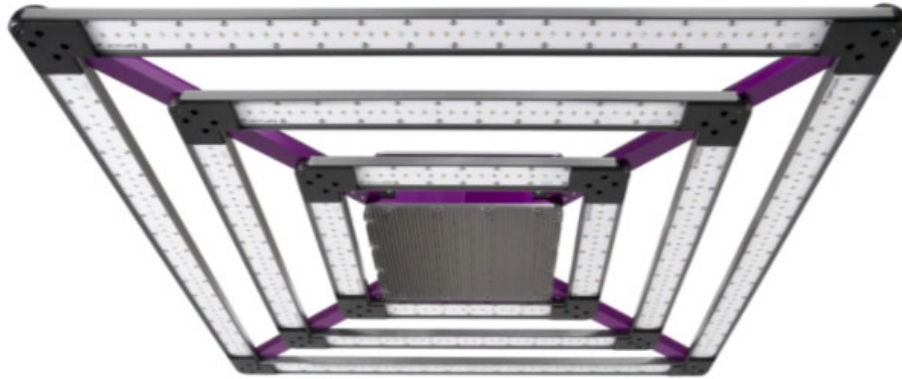
92. On information and belief, the housing element includes a transparent region enabling transmission of light emitted by the one or more light-emitting elements therethrough; for example, the transparent window enables the transmission of light emitted by the LEDs to the outside of the housing element.

93. On information and belief, the substrate is a metal core printed circuit board.



Infringing X² Products

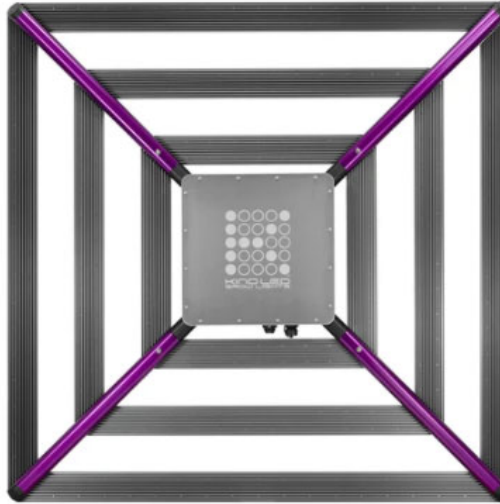
94. On information and belief, X² products include a light-emitting module. An X² product is shown in the below image, from Defendants' website (available at: <https://www.kindledgrowlights.com/collections/led-grow-lights/products/x2-commercial-led-grow-light>).



95. On information and belief, X² products include a thermally conductive substrate having one or more light-emitting elements thermally connected thereto, the substrate configured to operatively couple a source of power to the one or more light-emitting elements, thereby providing a means for activation of the one or more light-emitting elements; for example, X² products include a thermally conductive substrate formed by a metal-core printed circuit board thermally connected to LEDs. The metal-core printed circuit board is configured to operatively couple a source of power—an LED driver—to the LEDs in order to power and thus activate the LEDs.



1 96. On information and belief, X² products include a heat dissipation element
2 thermally coupled to the thermally conductive substrate; for example, X² products include a heat
3 dissipation element formed by a heat sink, which is thermally coupled to the printed circuit
4 board.

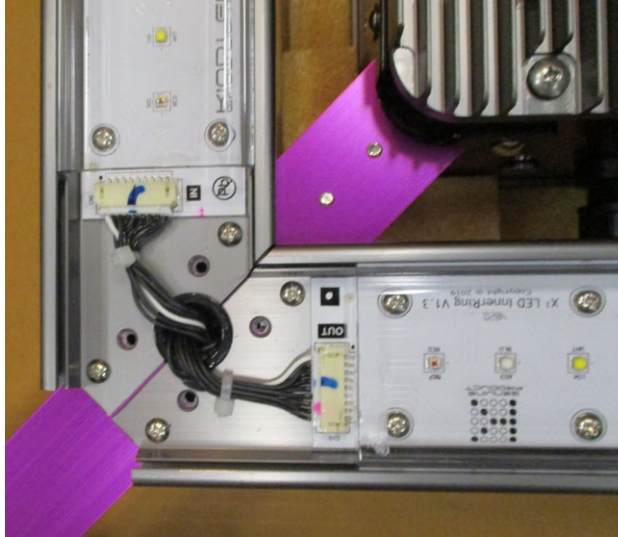


14 97. On information and belief, X² products include a housing element including
15 fastening means for detachably coupling the housing element to the heat dissipation element; for
16 example, X² products include a housing element, formed by a transparent window. The
17 transparent window includes a stepped surface that detachably couples to a bracket of the heat
18 sink that engages with the transparent window through contact with the stepped surface.

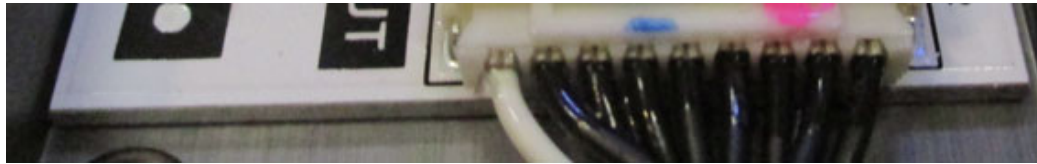


26 98. On information and belief, the substrate is enclosed between the heat dissipation
27 element and said housing element; for example, the printed circuit board is enclosed between the
28 transparent window and the heat sink.

99. On information and belief, the housing element includes a transparent region enabling transmission of light emitted by the one or more light-emitting elements therethrough; for example, the transparent window enables the transmission of light emitted by the LEDs to the outside of the housing element.



100. On information and belief, the substrate is a metal core printed circuit board.



101. The full extent of Defendants' infringement is not presently known to Signify. On information and belief, Defendants have made and sold, or will make and sell, products under different names or part numbers that infringe the '604 Patent in a similar manner. Signify makes this preliminary identification of infringing products and infringed claims in Count Three without the benefit of discovery or claim construction in this action, and expressly reserves the right to augment, supplement, and revise its identifications based on additional information obtained through discovery or otherwise.

102. Signify has suffered and continues to suffer damages as a result of Defendants' infringement of the '604 Patent in an amount to be determined at trial.

103. Defendants' infringement of the '604 Patent is causing irreparable harm for which Signify has no adequate remedy at law unless Defendants are enjoined by this Court.

1 Under 35 U.S.C. § 283, Signify is entitled to a permanent injunction against further infringement
2 of the '604 Patent.

3 104. On information and belief, Defendants have been aware of and have had notice
4 and actual knowledge of the '604 Patent and its infringement of the '604 Patent since at least as
5 early as May 2021. For example, Defendants and Kip Andersen were notified in a letter dated
6 May 6, 2021 that Defendants' XL300, XL750, and XD75 VEG Linear Grow Light products
7 infringed the '604 Patent. This letter serves as actual notice for, at least, these products and for
8 all substantially similar products, such as X² products. Further, upon information and belief, K3
9 series XL450, XL600 products, and K5 series XL1000 WiFi products are believed to be
10 substantially similar to XL300, XL750, and XD75 VEG Linear Grow Light products and, thus,
11 Defendants and Kip Andersen were likewise on actual notice of infringement for these products
12 by the letter of May 6, 2021 as of the date of the letter or, if later, the date these products were
13 first made, used, sold, offered for sale, or imported.

14 105. Defendants' pre-suit knowledge of the '604 Patent and failure to substantively
15 address Signify's numerous notifications of infringement are sufficient to support a plausible
16 inference that Defendants' infringement was willful and egregious, warranting enhancement of
17 damages under 35 U.S.C. § 284, and attorneys' fees and costs incurred under 35 U.S.C. § 285.

18 **COUNT FOUR**

19 **INFRINGEMENT OF U.S. PATENT NO. 7,766,518**

20 106. Signify incorporates by reference the allegations in paragraphs 1-14 as if fully set
21 forth herein.

22 107. On information and belief, Defendants have infringed claims of the '518 Patent,
23 including at least claim 1 and 3, in violation of 35 U.S.C. § 271(a) by manufacturing, using,
24 offering to sell, selling, and/or importing infringing products.

25 108. Claim 1 of the '518 Patent recites:

26 A light-generating apparatus, comprising:

27 an LED assembly, comprising:

28 an assembly substrate; and

a plurality of LED subassemblies coupled to the assembly substrate, each LED subassembly of the plurality of LED subassemblies forming at least one of a mechanical connection, an electrical connection, and a first thermal connection to the assembly substrate;

a plurality of secondary optical components; and a chassis coupled to the LED assembly and including a plurality of chambers in which the plurality of secondary optical components respectively are held, the chassis configured such that each secondary optical component of the plurality of secondary optical components is disposed in an optical path of a corresponding one of the plurality of LED subassemblies;

wherein the LED assembly is disposed between the thermally conductive base plate and the chassis.

109. Claim 3 of the '518 recites:

The apparatus of claim 1, wherein the chassis is a thermally conductive chassis.

110. On information and belief, Defendants have directly infringed, at least, claims 1 and 3 of the '518 Patent by making, using, offering to sell, selling, and/or importing at least XL300 and XL750 WiFi products in this District and elsewhere in the United States.

Infringing XL300 Products

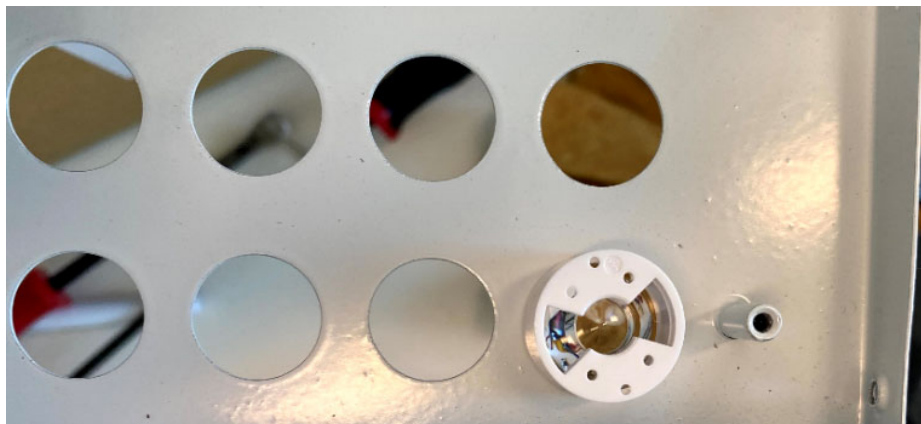
111. On information and belief, XL300 products include a light-generating apparatus.

112. On information and belief, XL300 products include an LED assembly, comprising an assembly substrate and a plurality of LED subassemblies coupled to the assembly substrate, each LED subassembly of the plurality of LED subassemblies forming at least one of a mechanical connection, an electrical connection, and a first thermal connection to the assembly substrate; for example, XL300 products include an LED assembly, comprising: an assembly substrate formed by a metal-core printed circuit board; and a plurality of LED subassemblies, each formed by an LED die and a dome lens, are coupled to the metal-core printed circuit board, each LED die of the plurality of LED dies forming a mechanical connection, an electrical connection, and a thermal connection to the printed circuit board.

113. On information and belief, XL300 products include a plurality of secondary optical components; for example, XL300 products include a plurality of secondary optical components, each formed by a secondary optical lens.



114. On information and belief, XL300 products include a chassis coupled to the LED assembly and including a plurality of chambers in which the plurality of secondary optical components respectively are held, the chassis configured such that each secondary optical component of the plurality of secondary optical components is disposed in an optical path of a corresponding one of the plurality of LED subassemblies; for example, XL300 products include a chassis formed by a metal frame that is coupled to the metal-core printed circuit board and includes a plurality of chambers in which the plurality of secondary optical lenses respectively are held. The metal frame is configured such that each cylindrical lens of the plurality of lenses is disposed in an optical path of a corresponding one of the plurality of LED dies.

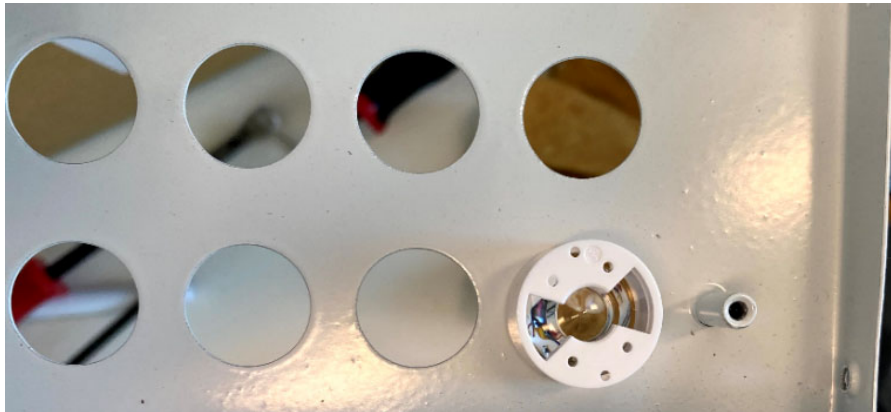


115. On information and belief, the LED assembly is disposed between the thermally conductive base plate and the chassis; for example, the LED assembly—as formed by the metal-

1 core printed circuit board, LED dies, and dome lenses—is disposed between the heat sink and
2 the metal frame.



10 116. On information and belief, the chassis is a thermally conductive chassis; for
11 example, the metal frame is a thermally conductive chassis.



19 **Infringing XL750 WiFi Products**

20 117. On information and belief, XL750 WiFi products include a light-generating
21 apparatus.

22 118. On information and belief, XL750 WiFi products include an LED assembly,
23 comprising an assembly substrate and a plurality of LED subassemblies coupled to the assembly
24 substrate, each LED subassembly of the plurality of LED subassemblies forming at least one of
25 a mechanical connection, an electrical connection, and a first thermal connection to the assembly
26 substrate; for example, XL750 WiFi products include an LED assembly, comprising: an
27 assembly substrate formed by a metal-core printed circuit board; and a plurality of LED
28 subassemblies, each formed by an LED die and a dome lens, are coupled to the metal-core

1 printed circuit board, each LED die of the plurality of LED dies forming a mechanical
2 connection, an electrical connection, and a thermal connection to the printed circuit board.

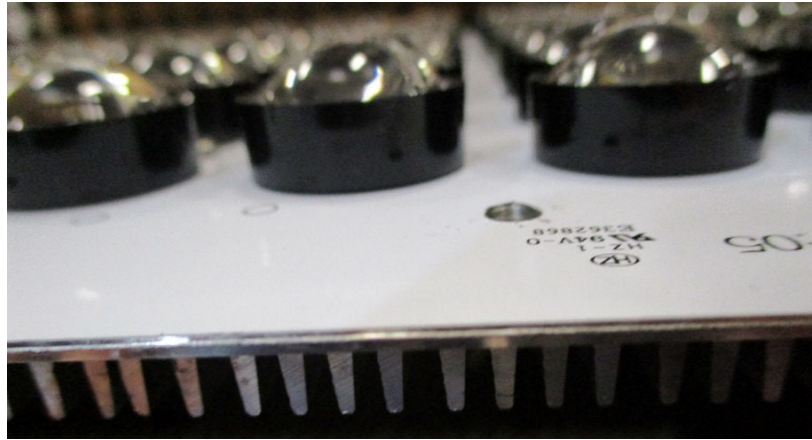
3 119. On information and belief, XL750 WiFi products include a plurality of secondary
4 optical components; for example, XL750 WiFi products include a plurality of secondary optical
5 components, each formed by a secondary optical lens.



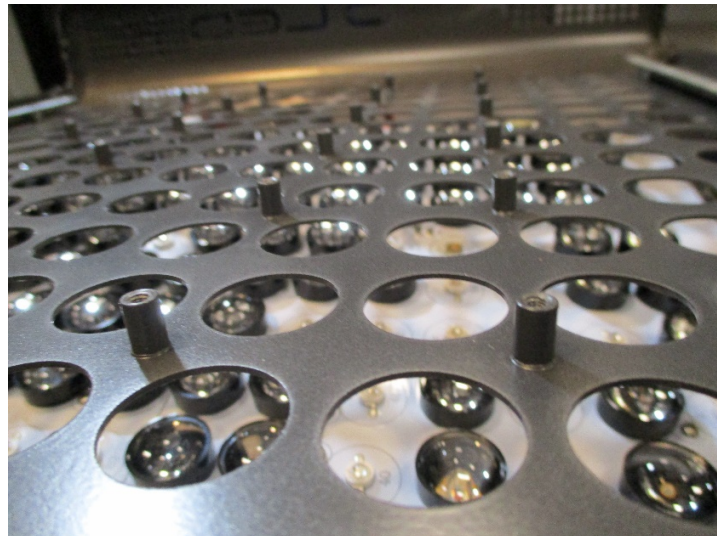
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12 120. On information and belief, XL750 WiFi products include a chassis coupled to the
13 LED assembly and including a plurality of chambers in which the plurality of secondary optical
14 components respectively are held, the chassis configured such that each secondary optical
15 component of the plurality of secondary optical components is disposed in an optical path of a
16 corresponding one of the plurality of LED subassemblies; for example, XL750 WiFi products
17 include a chassis formed by a metal frame that is coupled to the metal-core printed circuit board
18 and includes a plurality of chambers in which the plurality of secondary optical lenses
19 respectively are held. The metal frame is configured such that each cylindrical lens of the
20 plurality of lenses is disposed in an optical path of a corresponding one of the plurality of LED
21 dies.



1 121. On information and belief, the LED assembly is disposed between the thermally
2 conductive base plate and the chassis; for example, the LED assembly—as formed by the metal-
3 core printed circuit board, LED dies, and dome lenses—is disposed between the heat sink and
4 the metal frame.



18 122. On information and belief, the chassis is a thermally conductive chassis; for
19 example, the metal frame is a thermally conductive chassis.



1 123. The full extent of Defendants' infringement is not presently known to Signify. On
2 information and belief, Defendants have made and sold, or will make and sell, products under
3 different names or part numbers that infringe the '518 Patent in a similar manner. Signify makes
4 this preliminary identification of infringing products and infringed claims in Count Four without
5 the benefit of discovery or claim construction in this action, and expressly reserves the right to
6 augment, supplement, and revise its identifications based on additional information obtained
7 through discovery or otherwise.

8 124. Signify has suffered and continues to suffer damages as a result of Defendants'
9 infringement of the '518 Patent in an amount to be determined at trial.

10 125. Defendants' infringement of the '518 Patent is causing irreparable harm for
11 which Signify has no adequate remedy at law unless Defendants are enjoined by this Court.
12 Under 35 U.S.C. § 283, Signify is entitled to a permanent injunction against further infringement
13 of the '518 Patent.

14 126. On information and belief, Defendants have been aware of and have had notice
15 and actual knowledge of the '518 Patent and its infringement of the '518 Patent since at least as
16 early as May 2021. For example, Defendants and Kip Andersen were notified in a letter dated
17 May 6, 2021 that Defendants' XL300 and XL750 products infringed the '518 Patent. This letter
18 serves as actual notice for, at least, these products and for all substantially similar products.
19 Upon information and belief, K3 series XL450, XL600 products and K5 series XL1000 WiFi
20 products are believed to be substantially similar to XL300 and XL750 products and, thus,
21 Defendants and Kip Andersen were likewise on actual notice of infringement for these products
22 by the letter of May 6, 2021 as of the date of the letter.

23 127. Defendants' pre-suit knowledge of the '518 Patent and failure to substantively
24 address Signify's numerous notifications of infringement are sufficient to support a plausible
25 inference that Defendants' infringement was willful and egregious, warranting enhancement of
26 damages under 35 U.S.C. § 284, and attorneys' fees and costs incurred under 35 U.S.C. § 285.

PRAYER FOR RELIEF

WHEREFORE, Signify prays for the following judgments and relief:

(a) A judgment that Defendants have infringed and are infringing the Patents-in-Suit;

(b) A permanent injunction against Defendants and its affiliates, subsidiaries, assigns, employees, agents or anyone acting in privity or concert from infringing the '604 and '518 Patents, including enjoining the making, offering to sell, selling, using, or importing into the United States products claimed in any of the claims of the '604 and '518 Patents; using or performing methods claimed in any of the claims of the '604 and '518 Patents; inducing others to use and perform methods that infringe any claim of the '604 and '518 Patents; or contributing to others using and performing methods that infringe any claim of the '604 and '518 Patents, until the expiration of the '604 and '518 Patents;

(c) An award of damages adequate to compensate Signify for Defendants' patent infringement, and an accounting to adequately compensate Signify for the infringement, including, but not limited to, lost profits and/or a reasonable royalty;

(d) An award of pre-judgment and post-judgment interest at the maximum rate allowed by law;

(e) An order finding that this is an exceptional case and awarding Signify its costs, expenses, disbursements, and reasonable attorneys' fees related to Defendants' patent infringement under 35 U.S.C. § 285 and all other applicable statutes, rules and common law; and

(f) Such other further relief, in law or equity, as this Court deems just and proper.

JURY TRIAL

In accordance with Rule 38 of the Federal Rules of Civil Procedure, Signify hereby demands a jury trial on all issues triable before a jury.

1 DATED: October 12, 2021

Respectfully Submitted,

2 BARTKO ZANKEL BUNZEL & MILLER

3
4 By: /s/ Alden K.W. Lee

Alden K.W. Lee

5 Counsel for Plaintiffs

6 Signify North America Corporation

and Signify Holding B.V.